

CLAIMS

What is claimed is:

1. An apparatus for rolling a sod strip into a sod roll comprising:
 - a transport conveyer for displacing the sod strip;
 - a starter for initiating the rolling of the sod strip in proximity to a leading portion of the sod strip as it is displaced by the transport conveyer;
 - a tray for at least partially retarding displacement of an upper portion of the sod roll as it passes to assist rolling the sod strip;
 - an edge detector for detecting a trailing edge of the sod strip as the sod strip is displaced on the transport conveyer;
 - a roll-up conveyer for further rolling up the sod strip, the roll-up conveyer operating in a direction opposite the transport conveyer; and
 - a holding conveyer, the holding conveyer maintaining the sod roll on the transport conveyer.
2. The apparatus of claim 1 further comprising a sensor operating in cooperation with the edge detector, wherein the sensor is activated when the edge detector has detected the trailing edge portion of the sod strip.
3. The apparatus of claim 1 wherein the holding conveyer is oriented generally diagonally with respect to the roll-up conveyer.

4. The apparatus of claim 3 wherein the holding conveyor operates in the same direction as the transport conveyor.

5. The apparatus of claim 1 further comprising:
a sensor operating in cooperation with the edge detector, wherein the sensor is activated when the edge detector has detected the trailing edge portion of the sod strip; and
a length detector, the length detector determining a length of the sod strip that has been displaced by the transport conveyor.

6. The apparatus of claim 5 wherein the length detector determines the length of the sod strip displaced by the transport conveyor in accordance with displacement of the sod strip along the transport conveyor.

7. The apparatus of claim 5 further comprising a controller, the controller receiving inputs from the sensor and the length detector, the controller deactivating operation of the holding conveyor a predetermined time period after activation of the sensor.

8. An apparatus for rolling a sod strip being displaced by a transport conveyor into a sod roll comprising:

a trailing edge sensor for detecting a trailing edge portion of the sod strip;

a retaining device for retaining the sod roll in the conveyor as the sod strip is rolled into a sod roll; and

an ejector device for ejecting the roll in accordance with a position of the trailing edge portion of the sod strip.

9. The apparatus of claim 9 wherein the trailing edge sensor comprises a member in contact with the sod strip, the member being displaced to a first position when in contact with the sod strip and being displaced to a second position when not in contact with the strip, wherein displacement between the first and second positions indicates the presence of an edge portion of the sod strip.

10. The apparatus of claim 8 wherein the retaining device further comprises a holding conveyor, the holding conveyor located in proximity to an end of the transport conveyor, wherein activation of the holding conveyor retains the sod roll on the transport conveyor and deactivation of the holding conveyor enables the sod roll to move off of the transport conveyor.

11. The apparatus of claim 8 wherein the ejector device further comprises a controller, the controller receiving an input signal from the trailing edge sensor and enabling a predetermined time delay before deactivating the holdup conveyor.

12. The apparatus of claim 8 further comprising:
a controller, the controller receiving an input signal from the trailing edge sensor;
a transport conveyor sensor, the transport conveyor sensor measuring displacement of the transport conveyor, wherein the controller deactivates the holdup conveyor in response to a predetermined length of displacement of the transport conveyor following detection of the trailing edge portion of the sod strip.

13. A method for rolling sod strips into a sod roll comprising the steps of:
providing a transport conveyor;
locating a trailing edge portion of the sod strip;
retaining the sod roll in the transport conveyor as the sod strip is rolled into a sod roll; and
ejecting the roll in accordance with a position of the trailing edge portion of the sod strip.

14. The method of claim 13 wherein the step of detecting the trailing edge portion further comprises providing a member to contact the sod strip to indicate a first position when in contact with the sod strip and being displaced to a second position when not in contact with the sod strip, wherein displacement between the first and second positions indicates the presence of an edge portion of the sod strip.

15. The method of claim 13 wherein the step of retaining further comprises providing a holding conveyor, the holding conveyor located in proximity to an end of the transport conveyor, wherein activation of the holding conveyor retains the sod roll on the transport conveyor and deactivation of the holding conveyor enables the sod roll to move off of the transport conveyor.

16. The method of claim 13 wherein the step of ejecting further comprises enabling a predetermined time delay before deactivating the holdup conveyor.

17. The method of claim 13 further comprising the step of measuring displacement of the transport conveyor and wherein deactivating the holdup conveyor in response to a predetermined length of displacement of the transport conveyor following detection of the trailing edge portion of the sod strip.